

REMARKS

The law firm of Harrington & Smith has been requested by the Assignee to assume responsibility for the further prosecution of this patent application. A revocation of the prior power of attorney and a new power of attorney, with a change of correspondence address, has been filed. All future communications regarding this patent application should be directed to customer number 29683.

The specification has been amended to add the requested headings.

Filed herewith is a copy of WO 01/13299 A and another PTO-1449. If a fee is required to enter the PTO-1449 and consider this reference then the fee should be charged to deposit account no.: 50-1924.

With respect to the claim objections, all abbreviations have been deleted from the claims and the word "if" has been removed from the preamble of claim 9. The claim objections should thus be rendered moot.

Claims 1-19 were rejected under 35 USC 101 as being directed to non-statutory subject matter.

With regard to the rejection of claims 1-7, it is noted that claim 1 refers to several databases as comprising part of the travel product reservation system. It is clearly not admitted that a database is nothing more than "program code/software". One definition of a data base is: "A collection of information arranged into individual records to be searched by computer." <http://www.library.cornell.edu/olinuris/ref/research/vocab.html>. A database is thus clearly not "program code/software", and the presence of a database implies the presence of some tangible data storage medium for storing the database. Further, claim 1 has been amended to recite that the central computer reservation system comprises "a plurality of engines configured to process user requests", and that the "means for calculating and the means for returning comprise a search apparatus". Clearly, claim 1 is not directed to software *per se*, and presents statutory and patentable subject matter.

Claim 8 has been amended to recite in part a "method of processing with a computer reservation system, that comprises a plurality of engines and databases, a user request from a user station". Claim 8 as amended is "tied to a particular machine or apparatus", clearly meets the first prong of the new Federal Circuit decision, and thus presents statutory subject matter.

The Examiner is respectfully requested to reconsider and remove the rejections of claims 1-19 under 35 USC 101.

Claims 1, 2, 8 and 12 were rejected under 35 USC 112, second paragraph for the reasons of record. These claims, in addition to all other pending claims, have been amended above to address each of the Examiner's alleged instances of indefinite subject matter, and to even further improve the clarity and readability of the claim language. It is submitted that the foregoing amendments have rendered the rejection under 35 USC 112, second paragraph, moot, and the Applicants respectfully request that the rejection be reconsidered and removed.

Claims 1-19 have been rejected under 35 USC 103(a) as being unpatentable over Charlton et al. (US 2002/0065688) in view of Daughtrey et al. (US 2004/0078252). The rejection is respectfully disagreed with, and is traversed below.

In rejecting claim 1 the Examiner states in part: that Charlton et al. teach:

"sorting the travel products by fare family (Paragraphs 0044-0046; Paragraph 0022; Paragraph 0035), and;

d. returning to the user station a reply containing data relating to the products that meet the input criteria, for display, by sorting them into fare families (Paragraphs 0044-00048) (Charlton teaches returning from a web server lowest fares sorted by fare class including economy/world traveler plus/club etc. that meet the user input of date of departure/return, etc. and requested fare restriction types).

Charlton does not explicitly teach, creating a database of fare families containing

rules for determining the association with at least one fare family for each travel fare, accessing the rules of determination contained in the fare family database, and; applying the rules of determination to the travel products found to determine their fare family.

However, Daughtrey teaches a similar system and method and the system and method of Daughtrey indeed includes, creating a database of fare families containing rules for determining the association with at least one fare family for each travel fare (Paragraphs 0050-0057; Paragraph 0047), accessing the rules of determination contained in the fare family database (Paragraphs 0050-0057; Paragraph 0047), and; applying the rules of determination to the travel products found to determine their fare family (Paragraphs 0050-0057; Paragraph 0047)."

The Examiner continues by stating that it would have been obvious to one of ordinary skill in the art at the time of invention to have incorporated

"creating a database of fare families containing rules for determining the association with at least one fare family for each travel fare, accessing the rules of determination contained in the fare family database, and; applying the rules of determination to the travel products found to determine their fare family, in accordance with the teachings of Daughtrey, in order to quickly associate the plurality of different fare types desired by the user with the fares found during the fare database search to quickly present the various lowest cost options by fare type, as suggested by Charlton (see, for example, Paragraph 0044), since so doing could be performed readily and easily by any person of ordinary skill in the art with neither undue experimentation, nor risk of unexpected results."

The Examiner's rejection is respectfully disagreed with, and is traversed below.

By way of introduction and clarification, the exemplary embodiments of this invention in one aspect thereof provide a novel data structure referred to as a "fare family". Fare families allow for the grouping of fare classes in order to improve the processing of travel requests. Whereas fare classes are numerous (e.g., each provider, such as an airline, may produce hundreds of fare classes), the fare families enable the grouping of fare classes so that the results displayed to a user are made more informative and clear. The use of the exemplary embodiments allows travel providers to create/define a family of fares that match commercial criteria/fare attributes. Travel providers can use the fare families to structure their offering by "type/level of service" with the

possibility to define families per geographical area (market pair) and date/range of dates.

Fare families can be built on criteria/fare attributes that go beyond the typical "ticket type" (e.g., refundable, flexible, etc.) and cabin (e.g. business, economy, premium, etc.) Examples of fare families could include, as non-limiting examples, Economy, Non-Refundable, Flexible, SuperPromo, SpeciaRateforStudents, combinable flights, free lounge access (i.e., a certain flight comes with free access to lounge), free Internet access, additional baggage, etc.

Current systems, such as those disclosed by Charlton et al. and Daughtrey et al., are focused on the price of the travel products, and display those travel products having the lowest selling price.

The exemplary embodiments of this invention offer a refined display of travel products taking into account their price, but also the fare family to which they belong.

An exemplary display, per fare family, which is enabled due to the use of the exemplary embodiments of this invention is shown in Figure 7 of the application.

For an end consumer there is made visible the display of available flight/fare classes. However, instead of being presented simply with a list of the least expensive flights, a list of flights sorted by fare family is displayed. The end consumer can thus advantageously compare the various prices with their associated level of service. The use of this technique thus provides a means to enhance incentive sales of travel products by showing additional services (in the fare family) that may be associated with a higher price.

With respect now to claims 1 and 8, the Applicants respectfully disagree that Charlton et al. disclose fare families and the sorting the travel products by fare families. (points c and d on page 10 of the Office Action, reproduced above).

Instead, Charlton et al. describe a typical end-to-end booking flow from the search to the confirmation page. Within this flow the user has the possibility at search time to select the ticket

type; the system returns a list of available flight/price for which such ticket types are available (see paragraphs 26, 35).

The ticket types of Charlton et al. are not equivalent to the fare families as claimed in claims 1 and 8. Ticket types are static data and describe separate ticket conditions and associated services, whereas fare families are composed of fare classes and thus represent structures of a higher level than ticket types.

Moreover, merely categorizing flight/price per ticket type is very limiting and does not achieve a purpose of the fare family, i.e., the travel provider cannot structure a flight offer by service provided, which in turn does not allow the travel provider to make prices readily comparable on a user display and, thus, does not provide any incentive to the end consumer to purchase a more expensive flight or flights.

As such, working simply with ticket types (as in Charlton et al.) imposes limitations. In addition, Charlton et al. fail to disclose any step/operation or mechanism that is equivalent to, or that would suggest, a creation of fare families comprised of fare classes.

Charlton et al. use the words "ticket type" and "fare". According to Charlton et al. the ticket types are chosen among Economy, Flexible, World traveler plus, Club, First, Concorde (see Table 3). Fares are amounts associated with a journey in accordance with a ticket type. See, for example, the display "from fare" described in paragraph 46, which clearly shows that a fare is a price in Charlton et al.

In contrast, an aspect of the exemplary embodiments of the invention is to display synthetic results, since fare families group fare classes and simplify the results screen for the user.

Lacking the concept of the fare family a skilled person would simply reduce the display to a screen showing the lowest priced travel products, as has been done in conventional systems.

In summary, Charlton et al. fail to disclose at least the following feature of claim 1 as newly presented above:

a fare family database for the definition of a plurality of fare families each comprised of a plurality of fare classes, the fare family database containing determination rules for determining an association of a fare family with fare classes.

Charlton et al. simply disclose ticket types and not fare classes. Charlton et al. do not show any association of fare classes into fare families. Charlton et al. thus do not show determination rules for determining this association, nor is there described storing fare family definition data in a database.

Charlton et al. also fail to disclose at least the following features of claim 1 as newly presented above:

means for communicating with the fare family database for gaining access to the determination rules,

means for applying the determination rules to each travel product for determining the fare family in accordance with its fare class.

Charlton et al. disclose a conventional process for responding to a travel request from an user. In Charlton, there is no step for determining the fare family of a travel product in accordance with its fare class.

Charlton et al. also fail to disclose at least the following features of claim 1 as newly presented above:

means for sorting the travel products into fare families,

means for building a reply to the user request, said reply configured to produce a display of data relating to those travel products that meet the input criteria, said data comprising, for each displayed travel product, a selling price amount, where

the displayed travel products are sorted into fare families each comprised of a plurality of fare classes.

Charlton et al. disclose the simple sorting of the results by ticket type, and not by fare family comprised of fare classes (e.g., see Charlton et al. at paragraph 46).

Clearly, Charlton et al. is devoid of disclosure of a fare family. The addition of the disclosure of Daughtrey et al. to the disclosure of Charlton et al. does not remedy this lack of disclosure.

Daughtrey et al. describe a technique to handle flexible date queries: a query for a particular date is entered and the system returns and displays a set of solutions for that date plus and minus some number of days. The display is done in a calendar (least expensive flight available per day). Figure 4 shows that flight/price are displayed in a calendar with the least expensive flight per day. Figure 5 shows the display of all possible flights/price for a particular day. The panel at the top highlights the cheapest offer per airline/number of stops.

There is no notion of a fare family in the disclosure of Daughtrey et al. Instead there is simply the disclosure of a standard search technique with flexible dates, and the display of a list of cheapest flights. What is computed and displayed is a "raw" list of flight/price (1 flight F> price).

The Applicants respectfully disagree with the Examiner's characterization of Daughtrey et al. as disclosing a fare family database containing rules, etc.. In Daughtrey et al. what is stored in database 63 are solutions matching travel queries entered by users. The database 63 of Daughtrey et al. is used as a cache, as described in paragraph 38, 39. This is clearly no disclosure of, nor a suggestion of, a fare family database as filed and as now even more clearly recited in claim 1:

a fare family database for the definition of a plurality of fare families each comprised of a plurality of fare classes, the fare family database containing determination rules for determining an association of a fare family with fare classes.

Daughtrey et al. discloses using classes of service as criteria for producing a display, where price

offers are organized by class of service (see paragraph 47). This is not seen to be any more relevant than the display by Charlton et al. by ticket type. Clearly, the concept of a fare family comprised of fare classes is lacking in the proposed combination of these references.

In addition, Daughtrey et al. display only minimum prices available for the criteria of the tab (see Fig. 5), and not travel products sorted by fare families.

In conclusion, even if one were to combine Charlton et al. and Daughtrey et al., which is not admitted is suggested or feasible, there would still be no disclosure or suggestion of a fare family and/or the use of a fare family as claimed. The paragraphs 47 and 50-57 of Daughtrey et al., specifically mentioned by the Examiner, do not disclose or suggest the presence or the use of fare families.

However, in order to even further distinguish the claimed invention from the proposed combination of Charlton et al. and Daughtrey et al. the Applicants have amended claim 1 to further distinguish "fare" (now recited as "fare class", which indicates other than a simple amount) and "price" (now selling price amount).

For example, claim 1 now recites in part that the system includes:

a fare family database for the definition of a plurality of fare families each comprised of a plurality of fare classes, the fare family database containing determination rules for determining an association of a fare family with fare classes,

means for applying the determination rules to each travel product for determining the fare family of its travel fare class,

means for sorting the travel products found into fare families, and

means for building a reply to the user request, said reply configured to produce a display of data relating to those travel products that meet the input criteria, said data comprising, for each displayed travel product, a selling price amount, where the displayed travel products are sorted into fare families each comprised of a

plurality of fare classes.

Claim 8 has been amended in a similar fashion, and should also be found to clearly allowable over the proposed combination of Charlton et al. and Daughtrey et al.

In addition, all of the dependent claims have been further clarified. In that each of these dependent claims is dependent from a clearly allowable base claim, then for at least this one reason all of these claims should be found to be allowable as well. In addition, and by example, the recited commercial classes are high level structures which group fare families. This further super-structure is not disclosed or suggested in the cited references.

Claims 20 and 21 are newly added, and should also be found to be allowable.

The Applicants have made an attempt to place the pending claims in condition for immediate allowance, and have clearly distinguished the claimed subject matter from the disclosures of the references that were cited and applied by the Examiner. However, if the Examiner feels that a telephone interview would be useful to advance the prosecution of this application towards allowance, he is respectfully requested to contact the undersigned attorney to arrange an interview.

The Examiner is respectfully requested to reconsider and remove the rejections of the claims and to allow all of the pending claims 1-21 as now presented for examination. An early notification of the allowability of claims 1-21 is earnestly solicited.

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Respectfully submitted:



Harry F. Smith
Reg. No.: 32,493

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Date

Customer No.: 29683

Harrington and Smith, Attorneys At Law, LLC
4 Research Drive
Shelton, CT 06484-6212

Telephone: (203)925-9400
Facsimile: (203)944-0245
email: hsmith@hspatent.com

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Elaine Y. Main
Name of Person Making Deposit